

Amendments to the Specification

Please delete the paragraph beginning on page 1, line 9 and replace it with the following:

This application claims the benefits of priority to United States Provisional Patent Application Nos. 60/399,616, filed July 30, 2002 and 60/400,034, filed July 30, 2002. The disclosures of each of these applications are hereby incorporated by references in their entirety, including all figures, tables, and drawings.

Please delete paragraph [0004] and replace it with the following:

[0004] Various contrivances have been built to monitor beehive activity, consisting of an assortment of mechanical systems, hydraulic devices, heat sensors and oscillating cylinders, weight systems, and counting systems. Virtually all of these devices are highly imprecise and requires require constant maintenance. Simple sensors such as temperature probes are sometimes used to monitor colonies. Simple spring-mounted or electronic balance scales are used to weight hives. In 1969, Spangler published the details of a photoelectric counting device for hives to monitor the number of outgoing and incoming bees (J. Econ. Entomol., 62, 1183-1184). Struye *et al.* described a microprocessor-controlled monitoring unit to record honey bee flight at the hive in 1994 (Apidologie 25, 184-195). A group of bee counters named BeeScan, Apiscan, and BumbleScan sold by Lowland Electronics bvba, Belgium (BE101105A6) were developed using Struye's work. The counters incorporated two infra-red detectors on a single chip, separated by a micropgap. The counters can resolve a separation of 1 mm between bees which reduces the chance of miss counting bees as they move head to tail through the counter. These counters, have an on-hive microprocessor and liquid crystal display (LCD) but they simply count bees. Programming the microprocessor is laborious and the unit is costly. Data from the BeeScan must be collected at the hive or can be downloaded to a portable computer. Although the BeeScan must be collected at the hive or can be downloaded to a portable computer. Although the BeeScan units are reliable, data from the counters can not be downloaded in continuous mode or ported to a communications network. In addition, the